

Appl. N .: 09/392,170  
Amdt. dated September 17, 2003  
Reply to Office action of Jun 17, 2003

### REMARKS/ARGUMENTS

Applicants have received the Office Action dated June 17, 2003, in which the Examiner: (1) rejected claims 16, 44, and 56 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph; (2) rejected claims 2, 4-9, 11-12, 15-19, 24-25, 27-28, 30, 32-37, 43-47, and 52-57 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,457,028 B1 (*Pitkow et al.*) in view of U.S. Patent No. 6,370,527 B1 (*Singhal*); (3) rejected claims 3, 10, 31, and 38 as obvious over *Pitkow* and *Singhal* in view of U.S. Patent No. 6,285,999 B1 (*Page*); (4) rejected claims 13-14, 20-22, 26, 41-42, 48-50, 54, and 58-59 as obvious over *Pitkow*, and (5) rejected claims 23 and 51 as obvious over *Pitkow* in view of *Page*.

Applicants have canceled claims 33-34 and 43, amended claims 16, 44, and 56, and added new claims 60-62. Based on the arguments and amendments contained herein, Applicants believe the pending claims are allowable over the art of record and respectfully request reconsideration.

#### **I. The § 112, 2nd Paragraph, Rejections**

The Examiner noted an ambiguity in claims 16, 44, and 56. Applicants have amended claims 16, 44, and 56 to more particularly point out which host and document are added to the host and document sets. No new matter has been added therein. Applicants believe claims 16, 44, and 56 should be allowable over § 112, 2nd paragraph.

#### **II. The § 103(a) Rejections**

##### **A. Claim 2**

The Examiner rejected claim 2 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 2 is directed to a computer-implemented method for randomly walking through a hypertext-linked document that comprises, among other features, selecting at random, responsive to the non-occurrence of a random event, a link in a retrieved document and retrieving a document referenced by the selected link until a pre-determined condition is met.

The Examiner apparently contends that *Pitkow* teaches the random walking, as defined by claim 2. Applicants respectfully transverse this contention based on the following reasons.

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First, *Pitkow* teaches a method for gathering web pages which "automatically follows the links on a document and collects the linked documents. Or, the document collection could be some randomly selected collection of documents." (Col. 7, lines 51-54). The fact that *Pitkow* may use a "randomly selected collection" for the web page collection process does not suggest, or even imply, that *Pitkow* teaches selecting at random a link in a retrieved document, as required by claim 1.

Second, *Pitkow* does not teach, suggest, or even imply selecting at random a link responsive to the non-occurrence of a random event. *Pitkow* teaches "automatically" following the links, which is not a random event as required by claim 1.

Third, *Pitkow* does not teach, suggest, or even imply selecting at random a link and retrieving a document referenced by the selected link until a predetermined condition is met. *Pitkow* implies "automatically" following all links via a Web walker. (Col 7, lines 50-51).

For any or all of the foregoing reasons, Applicants respectfully submit that claim 2 and claims 3-6, which depend from claim 2, should be allowed.

#### **B. Claim 7**

The Examiner rejected claim 7 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 7 is directed to a computer-implemented method for randomly walking through a hypertext-linked document that comprises, among other features, selecting at random, responsive to the selected document containing at least one link, a link from a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the random walking, as defined by claim 7. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the selected document containing at least one link, or selecting at random a link until a predetermined condition is met, as required by claim 7.

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For any or all of the foregoing reasons, Applicants respectfully submit that claim 7 and claims 8 and 11-12, which depend from claim 7, should be allowed.

**C. Claim 9**

The Examiner rejected claim 9 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 9 is directed to a computer-implemented method for randomly walking through a hypertext-linked document that comprises, among other features, selecting at random, responsive to non-occurrence of a random event and further responsive to the selected document containing at least one link, a link from a selected document until a first predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the random walking, as defined by claim 9. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 9.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 9 and claim 10, which depend from claim 9, should be allowed.

**D. Claim 13**

The Examiner rejected claim 13 as being obvious over *Pitkow*. Claim 13 is directed to a computer-implemented method for measuring relative quality of a search engine index that comprises, among other features, performing a two-level random walk among documents within a document set.

The Examiner apparently contends that *Pitkow* teaches a two-level random walk, as required by claim 13. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose performing a two-level random walk as indicated in the Applicants' specification and as required by claim 13.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 13 and claim 14 and 16-19, which depends from claim 13, should be allowed.

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**E. Claim 15**

The Examiner rejected claim 15 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 15 is directed to a computer-implemented method for measuring relative quality of a search engine index that comprises, among other features, selecting at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the method, as defined by claim 15. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 15.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 15 should be allowed.

**F. Claim 20**

The Examiner rejected claim 20 as being obvious over *Pitkow*. Claim 20 is directed to a computer-implemented method for measuring relative quality of a target document that comprises, among other features, performing a two-level random walk among documents within a document set.

The Examiner apparently contends that *Pitkow* teaches the two-level random walking, as defined by claim 20. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose performing a two-level random walk as defined by the Applicants' specification and as required by claim 20.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 20 should be allowed.

**G. Claim 21**

The Examiner rejected claim 21 as being obvious over *Pitkow*. Claim 21 is directed to a computer-implemented method for measuring relative quality of a target document that comprises, among other features, performing a two-level random walk among documents within a document set.

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The Examiner apparently contends that *Pitkow* teaches the two-level random walking, as required by claim 21. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose performing a two-level random walk, as defined in the Applicants' specification and as required by claim 21.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 21 and claims 22-23 and 26, which depends from claim 21, should be allowed.

**H. Claim 24**

The Examiner rejected claim 24 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 24 is directed to a computer-implemented method for measuring relative of a target document that comprises, among other features, selecting at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the method, as defined by claim 24. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 24.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 24 should be allowed.

**I. Claim 25**

The Examiner rejected claim 25 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 25 is directed to a computer-implemented method for measuring relative quality of a target document that comprises, among other features, selecting at random, responsive to non-occurrence of a random event, a link from a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the method, as defined by claim 25. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not

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disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 25.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 25 should be allowed.

**J. Claim 27**

The Examiner rejected claim 25 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 25 is directed to a computer-implemented method for randomly walking through a hypertext-linked document set including, among other features, selecting at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the method, as defined by claim 27. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 27.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 27 should be allowed.

**K. Claim 28**

The Examiner rejected claim 28 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 28 is directed to a computer-implemented method for measuring the quality of a target document including, among other features, selecting at random, responsive to non-occurrence of a random event, a link from a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the method, as defined by claim 28. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 28.

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For any or all of the foregoing reasons, Applicants respectfully submit that claim 28 should be allowed.

**L. Claim 30**

The Examiner rejected claim 30 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 30 is directed to a computer program product that comprises, among other features, computer-readable program devices that select at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 30. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 30.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 30 and claims 31-32, which depend from claim 30, should be allowed.

**M. Claim 35**

The Examiner rejected claim 35 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 35 is directed to a computer program product having code for randomly walking through a hypertext-linked document that comprises, among other features, computer-readable program code that selects at random, responsive to non-occurrence of a random event, a link from a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 35. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 35.

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For any or all of the foregoing reasons, Applicants respectfully submit that claim 35 and claims 36 and 39-40, which depend from claim 35, should be allowed.

**N. Claim 37**

The Examiner rejected claim 37 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 37 is directed to a computer program product having code for randomly walking through a hypertext-linked document set that comprises, among other features, computer-readable program code that selects at random, responsive to non-occurrence of a random event, a link from a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 37. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 37.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 37 and claims 38, which depend from claim 37, should be allowed.

**O. Claim 41**

The Examiner rejected claim 41 as being obvious over *Pitkow*. Claim 41 is directed to a computer program product for measuring the quality of a search engine index that comprises, among other features, computer-readable program code configured to cause a computer to perform a two-level random walk.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 41. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose performing a two-level random walk, as defined in the Applicants' specification and required by claim 41.



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For any or all of the foregoing reasons, Applicants respectfully submit that claim 41 and claims 42 and 44-47, which depend from claim 41, should be allowed.

**P. Claim 48**

The Examiner rejected claim 48 as being obvious over *Pitkow*. Claim 48 is directed to a computer program product that comprises, among other features, computer-readable program code that performs a two-level random walk.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 48. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose performing a two-level random walk, as defined in the Applicants' specification and as required by claim 48.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 48 should be allowed.

**Q. Claim 49**

The Examiner rejected claim 49 as being obvious over *Pitkow*. Claim 49 is directed to a computer program product having code for measuring the relative quality of a target document and that comprises, among other features, computer-readable program code that performs a two-level random walk.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 49. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose performing a two-level random walk, as defined in the Applicants' specification and required by claim 49.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 49 and claims 50-51 and 54, which depend from claim 49, should be allowed.

**R. Claim 52**

The Examiner rejected claim 52 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 52 is directed to a computer program product having code for measuring the relative quality of a target document and that comprises,

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among other features, computer-readable program code that selects at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 52. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 52.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 52 should be allowed.

**S. Claim 53**

The Examiner rejected claim 53 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 53 is directed to a computer program product that comprises code for measuring the relative quality of a target document in a document set and that comprises, among other features, computer-readable program code that selects at random, responsive to non-occurrence of a random event, a link in a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 53. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 53.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 53 should be allowed.

**T. Claim 55**

The Examiner rejected claim 55 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 55 is directed to a computer program product having

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code for randomly walking through a hypertext-linked document and that comprises, among other features, computer-readable program code that selects at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 55. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 55.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 55 should be allowed.

**U. Claim 56**

The Examiner rejected claim 56 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 56 is directed to a computer program product that contains code for measuring the relative quality of a target document and that comprises, among other features, computer-readable program code that selects at random, responsive to non-occurrence of a random event, a link in a selected document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 56. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link from a selected document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 56.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 56 should be allowed.

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**V. Claim 57**

The Examiner rejected claim 57 as being obvious over the combination of *Pitkow* and *Singhal*. Claim 57 is directed to a system for randomly walking through a hypertext-linked document that comprises, among other features, a link selector that selects at random, responsive to non-occurrence of a random event, a link in a retrieved document until a predetermined condition is met.

The Examiner apparently contends that *Pitkow* teaches the computer program product, as defined by claim 57. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose selecting at random a link in a retrieved document, selecting at random a link responsive to the non-occurrence of a random event, or selecting at random a link until a predetermined condition is met, as required by claim 57.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 57 should be allowed.

**W. Claim 58**

The Examiner rejected claim 58 as being obvious over *Pitkow*. Claim 58 is directed to a system for measuring the relative quality of a search engine index that comprises, among other features, a determination module that for each document encountered in a random walk, determines whether the document is indexed by the search engine.

The Examiner apparently contends that *Pitkow* teaches the system, as defined by claim 58. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose a determination module that for each document encountered in a random walk, determines whether the document is indexed by the search engine, as defined by the Applicants' specification and as required by claim 58.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 58 should be allowed.

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#### **X. Claim 59**

The Examiner rejected claim 59 as being obvious over *Pitkow*. Claim 59 is directed to a system for measuring the relative quality of a target document in a document set that comprises, among other features, a random walker for performing a two-level random.

The Examiner apparently contends that *Pitkow* teaches the system, as defined by claim 59. Applicants respectfully transverse this contention based upon the reasons provided above regarding claim 2. That is, *Pitkow* does not disclose a two-level random walk, as defined by the Applicants' specification and as required by claim 59.

For any or all of the foregoing reasons, Applicants respectfully submit that claim 59 should be allowed.

#### **III. New Claim 60**

New claim 60 is directed to a system that includes, among other features, a processor that initializes a document set, selects an arbitrary hyperlink associated with a selected document in the document set, and adds a document referenced by the hyperlink to the document set. The art of record does not teach selecting a random hyperlink from a selected document and adding a document referenced by the random link to a document set. Applicants believe claim 60 and claim 61-62, which depend from claim 60 are allowable over the art of record.

#### **IV. Conclusion**

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

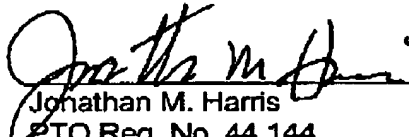
If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-

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Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

Applicants respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

  
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